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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,135	05/30/2000	Norio Saitoh	192292US2	1267

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
PARK, CHAN S	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 10/07/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/579,135	SAITOH, NORIO	
	Examiner	Art Unit	
	CHAN S PARK	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 6 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *5/30/2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. *09/579135* .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3, 6-8, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Amano et al. U.S. Patent No. 6,100,996.

With respect to claim 1, the Amano et al. reference discloses a printer system (printer 1000 in fig. 1) which inputs drawing data (documents) created or edited by an application on a host computer (col. 11, line64 – col. 12, line 4), converts the drawing data to a printer language to create print data (col. 15, lines 16-19), and also outputs the image drawn based on the print data from a printer (col. 12, lines 33-36), said printer system comprising:

A printer driver (CPU 1 in conjunction with ROM 3b) which adds information for a drawing object to identify the type of drawing object to the print data (col. 14, lines 30-34); and

A printer control unit which selects dither data appropriate for a drawing object based on the information for a drawing object based on the information for a drawing

object added to the print data, and executes a dither method based on the dither data on the print data to expand the data to an image (col. 14, lines 34-49).

2. With respect to claim 2, the Amano et al. reference further discloses a printer control unit comprising:

An object determination unit which determines a drawing object of the print data based on the information for a drawing object (col. 14, lines 34-37);

A dither data output unit which selects dither data matching the drawing object determined by said object determination unit to output the data (col. 14, lines 44-49); and

A drawing processing unit, which executes a dither method on the print data, using the dither data output from said dither data output unit to expand the data to an image (col. 14, line 52 – col. 15, line 9).

3. With respect to claim 3, the Amano et al. reference further discloses the drawing object which includes at least one of a character, a photograph, and a graphics (col. 15, lines 45-50).

4. With respect to claim 6, arguments analogous to those presented for claims 1 and 2, are applicable.

5. With respect to claim 7, arguments analogous to those presented for claims 1 and 2, are applicable.

6. With respect to claim 8, arguments analogous to those presented for claim 3, are applicable.

7. With respect to claim 11, arguments analogous to those presented for claims 1 and 2, are applicable. Also see col. 12, lines 5-10.

8. With respect to claim 12, arguments analogous to those presented for claims 1 and 2, are applicable.

9. With respect to claim 13, arguments analogous to those presented for claim 3, are applicable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 9, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano et al as applied to claim 1 above, and further in view of Garcia et al. U.S. Patent No. 6,542,258.

10. With respect to claim 4, Amano et al. discloses all the limitations of claim 1 but it does not teach a printer system which adds information for area fill in a graphics data.

The Garcia et al. reference, however, discloses a dither printing system (col. 44, line 14) comprising a printer driver 31 that refines graphic data (col. 44, lines 1-2), and a printer controller 40 that receives dither data and controls the print engine accordingly (col. 44, lines 4-19). The reference also discloses the method of indicating the presence or absence of area fill in a graphic image (col. 25, line 66) and the method of changing the dither method depending on what type of image is to be printed (col. 25, lines 30-36 & col. 26, lines 11-12).

Amano et al. and Garcia et al. are analogous art because they are from same field of endeavor, that is the printing art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method of indicating the presence of area fill in a graphic image taught by Garcia et al. with the printing system that selects dither data appropriate for a drawing object based on the information for a drawing object added to the print data taught by Amano et al.

The motivation for doing so would have been to apply the dither method to high-density areas.

Therefore, it would have been obvious to combine Amano et al. with Garcia et al. to obtain the invention as specified in claim 4.

11. With respect to claim 9, arguments analogous to those presented for claim 4, are applicable.

12. With respect to claim 14, arguments analogous to those presented for claim 4, are applicable.

Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano as applied to claim 1 above, and further in view of Nakajima U.S. Patent No. 6,266,152.

13. With respect to claim 5, Amano et al. discloses all the limitations of claim 1 but it does not teach if the drawing data can be CAD data created by a CAD application.

The Nakajima reference, however, discloses a printing system comprising a print driver (driver 20) for selecting appropriate color matching methods for natural, graphic, and text image (col. 8, table 1), and a print controller (controller 70) that performs dither process on the basis of drawing command (col. 6, lines 58-65). The reference further teaches that the drawing data can be CAD data to perform accordingly (col. 8, lines 31-41).

Amano et al. and Nakajima are analogous art because they are from same field of endeavor that is the printing art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method of applying CAD data to the printing system taught by Nakajima with the printing system that selects dither data appropriate for a drawing object based on the information for a drawing object added to the print data taught by Amano et al.

The motivation for doing so would have been to apply correct dither correction method to the CAD data created by a CAD application and to prevent the possibility of erasing the black thin lines in the mapping process.

Therefore, it would have been obvious to combine Amano et al. with Nakajima to obtain the invention as specified in claim 5.

14. With respect to claim 10, arguments analogous to those presented for claim 5, are applicable.

15. With respect to claim 15, arguments analogous to those presented for claim 5, are applicable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S PARK whose telephone number is (703) 305-2448. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Chan Park
September 22, 2003

EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600